

## PAPERS READ.

## NOTES FROM THE AUSTRALIAN MUSEUM.

## DESCRIPTIONS OF SOME NEW AUSTRALIAN FISHES.

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In the following paper will be found descriptions of four new fishes from Australian waters, the two first having been obtained in Port Jackson, namely, *Gobius depressus*, and *Monacanthus mosaicus*; the remaining two, *Solea textilis* and *Galaxias kayi* were sent for identification to us from the Adelaide Museum.

GOBIUS DEPRESSUS. *sp. nov.*

D. 6 : 1/10 : A. 1/9 : V. 1/5 : P. 17 : C. 15 : L. lat. ca. 42.  
L. trans. ca. 12.

Length of head  $5\frac{1}{3}$ , of caudal fin  $3\frac{2}{3}$ , height of body 11 in the total length. Eyes close together on the upper surface of the head, the diameter is  $4\frac{1}{2}$  in the length of the head and equal to that of the snout, which is obtuse. Head very much depressed, its breadth equal to the distance between the anterior margin of the eye and the gill-opening; its height  $2\frac{2}{3}$  in its length. Cleft of mouth oblique; lower jaw much the longer. Maxilla does not reach to the front margin of the orbit. Several rows of pointed teeth in both jaws, the outer row in each being much enlarged especially in front, and moderately curved. Fourth dorsal spine the longest, much more than the height of the body; the last spine is so far removed from the penultimate as to be almost midway between it and the origin of the soft dorsal: pectorals long, reaching to the vent and equal in length to the head: anal commences beneath the

first dorsal ray, and terminates beneath the eighth : caudal elongate, pointed. Anal papilla small. The colors appear to have been yellowish-brown, the head and fins being darkest.

The specimen measures three and a half inches, and was obtained by Mr. Brazier beneath a stone between tide marks on the Bottle and Glass Reef, Port Jackson, during last November. When it came into our hands it was unfortunately almost denuded of scales, whence the difficulty of determining with certainty the numbers on the lateral and transverse lines. Its registered number is B. 9,758.

MONACANTHUS MOSAICUS. *sp. nov.*

D. 35-36 : A. 32-34 : P. 13 : C. 12.

Length of head  $3\frac{1}{4}$ , of caudal fin  $4\frac{1}{5}$ , height of body  $1\frac{3}{4}$  in the total length. Eyes situated far back on the head, three diameters from the end of the snout, and one apart. Gill-opening oblique, reaching but little below the upper angle of the base of the pectoral, and equal to a diameter of the orbit, beneath the middle of which it is placed. Teeth with strong sharp angular points at intervals. Upper profile of snout rather concave ; back between the dorsals straight, and with a gradual rise to the origin of the second dorsal. The dorsal spine commences above the anterior third of the eye ; it is moderately strong, curved backwards, and bears four series of small barbs, the anterior pair being close together : soft dorsal and anal low, the longest rays being in the first quarter. Ventral spine very short, fixed ; pectorals situated directly beneath the eyes ; caudal rounded. Skin velvety. *Colors*, red with anastomosing blue lines on the head and body ; some of the upper spaces so formed have a large central spot of umber brown ; caudal brownish.

The description has been taken from two specimens measuring respectively  $4\frac{2}{3}$  and 4 inches, which were trawled off Shark Reef, Port Jackson, on the 9th instant. Registered numbers B. 9754-5.

SOLEA. TEXTILIS. *sp. nov.*

D. 60 : A. 43 : V. 5 : C. 18 : L. lat. 68.

Length of head  $\frac{1}{5}$ , height of body  $\frac{1}{3}$  of the total length. The lower eye commences slightly in advance of the upper ; its diameter is  $\frac{1}{6}$  of the length of head, and equal to that of the snout ; interorbital space deeply concave,  $\frac{1}{2}$  of a diameter of eye. Height of head equal to its length. Upper jaw a little the longer. Lower profile of head fringed with numerous small hair-like tentacles ; a few coarser ones on the lower jaw. The angle of the mouth reaches to below the anterior margin of the lower eye. Anterior nostril tubular ; a short fringed tentacle in front of the upper eye. Teeth minute. Dorsal and anal rays branched at the tips : ventrals separate from the anal : pectorals absent : caudal rounded. Scales strongly ctenoid ; none on the dorsal and anal rays. *Colors*, sandy, each scale with a narrow semi-circular black margin.

This species belongs to that division of the genus *Solea* separated by Hr. Kaup as *Aserragodes*. Our example measures  $4\frac{4}{5}$  inches in length, and was obtained by the trawl in the Gulf of St. Vincent, some ten miles due west from Glenelg Jetty, in water about twelve fathoms in depth : it has been received in exchange from the Adelaide Museum. Registered number in the Australian Museum I.1.

GALAXIAS KAYI. *sp. nov.*

D. 10 : A. 11 : V. 8 : P. 14 : C. 16 : Vert 33/20.

Length of head  $5\frac{3}{4}$ , of caudal fin  $7\frac{2}{5}$ , height of body 6 in the total length. Diameter of eyes  $\frac{2}{3}$  of the length of the head,  $\frac{5}{7}$  of that of the snout, and  $\frac{2}{3}$  of the interorbital space, which is flat. The breadth of the head is equal to its height, and to the length behind the middle of the eye. Jaws equal ; maxilla reaches to beneath the middle of the eye. Each jaw with a single row of small subulate teeth ; edge of the tongue with several larger recurved teeth ; palatine teeth shorter and blunter in a narrow row on the inner margin of the bones. The length of the interspace between the dorsal and anal fins is equal to the distance between the front

margin of the eye and the base of the pectoral fin ; that between the anal and caudal equal to the head in front of the hind margin of the eye ; anal commences beneath the seventh dorsal ray : the length of the pectoral is  $\frac{2}{5}$  of the distance of its root from the ventral, which latter terminates more than its own length from the vent. *Colors*, olive green above the lateral line, yellow below ; generally some short fasciæ depending from the former color.

Several specimens of this handsome *Galaxias* have been forwarded to us for identification by our esteemed correspondent, Mr. Robert Kay, General Director and Secretary of the Adelaide Museum, after whom we have named it ; they were taken in Fifth Creek, S. Australia ; the largest measures  $3\frac{3}{4}$  inches, and is registered, I. 3.